

Practitioner's Docket No. NEB-236-PUS

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application of: Chudi Guan, Sanjay Kumar and Rebecca Kucera

for *Modified DNA Cleavage Enzymes and Methods for Use (as amended by ISA)*, the specification of which is being transmitted herewith.

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

## List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

1. Forms PTO/SB/08A and 08B (formerly Form PTO-1449)
2. Copies of Listed Information Items Accompanying This Statement
3. Identification of Person(s) Making This Information Disclosure Statement

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**CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\***

(When using *Express Mail*, the *Express Mail* label number is *mandatory*;  
*Express Mail* certification is *optional*.)

I hereby certify that, on the date shown below, this correspondence is being:

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Signature

Date: July 13, 2006

Leslie Goldberg  
(type or print name of person certifying)

\* Only the date of filing ( ' 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under ' 1.8 continues to be taken into account in determining timeliness. See ' 1.703(f). Consider "Express Mail Post Office to Addressee" ( ' 1.10) or facsimile transmission ( ' 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

**AP20 Rec'd PCT/PTO 13 JUL 2006**

**Section 1. Forms PTO/SB/08A and 08B (formerly Form PTO-1449)**

(Insert form(s) PTO/SB/08A [Form 6-2] and/or form(s) PTO/SB/08B [Form 6-2.1].)

**Section 2. Copies of Listed Information Items Accompanying This Statement**

Legible copies of all items listed in Forms PTO/SB/08A and 08B (substitute for Form PTO-1449) accompany this information statement.

CA-CK

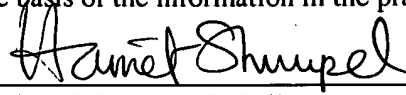
**Section 3.  
Statement****Identification of Person Making This Information Disclosure**

JUL 13 2006

The person making this certification is:

- a. the practitioner who signs below on the basis of the information in the practitioner's file.

Date: July 13, 2006



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PCT/PTO 13 JUL 2006

## SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Guan et al. Attorney Docket: NEB-236-PUS

Serial No: Not yet assigned Art Group Unit: Not yet assigned

Date Filed: Herewith Examiner Name: Not yet assigned

Invention: Modified DNA Cleaving Enzymes and Methods of Use (as amended)

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE STATEMENT

U.S. PATENT DOCUMENTS					
Examiner Initials	Reference Number	Document Number	Issue / Pub. Date	Inventor	Class/Subclass

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Reference Number	Document Number	Issue / Pub. Date	Applicant	Class/Subclass

OTHER DOCUMENTS			
Examiner Initials	Reference Number	Author	Title of Article, Title of Journal, Volume Number, Page Numbers, Date
\	CA	Aravind, et al.	"Holliday junction resolvases and related nucleases: identification of new families, phletic distribution and evolutionary trajectories," <i>Nucleic Acids Research</i> 28(18): 3417-3432 (2000)
	CB	Déclais, et al.	"The complex between a four-way DNA junction and T7 endonuclease I," <i>EMBO J.</i> 22:1398-1409 (2003)
	CC	Duckett, et al.	"Binding of the Junction-resolving Enzyme Bacteriophage T7 Endonuclease I to DNA: Separation of Binding and Catalysis by Mutation," <i>J. Mol. Biol.</i> 246:95-107 (1995)
	CD	Geer, et al.	"CDART: Protein Homology by Domain Architecture," <i>Genome Research</i> 12:1619-1623 (2002)

OTHER DOCUMENTS (Continued)			
Examiner Initials	Reference Number	Author	Title of Article, Title of Journal, Volume Number, Page Numbers, Date
	CE	Guan, et al.	"Changing the Enzymatic Activity of T7 Endonuclease by Mutations at the $\beta$ -Bridge Site: Alteration of Substrate Specificity Profile and Metal Ion Requirements by Mutation Distant from the Catalytic Domain," <i>Biochemistry</i> 43:4313-4322 (2004)
	CF	Guan, et al.	"Activation of Glycosylasparaginase," <i>J. Biol. Chem.</i> 19:1732-1737 (1996)
	CG	Hadden et al.	"Crystal structure of the Holliday junction resolving enzyme T7 endonuclease I," <i>Nature Structural Biology</i> 8(1): 62-67 (2001)
	CH	Lilley, D.M.J.	"All change at Holliday junction," <i>PNAS</i> 94, 9513-9515 (1997)
	CI	Mashal, et al.	"Detection of mutations by cleavage of DNA heteroduplexes with bacteriophage resolvases," <i>Nat. Genet.</i> 9:177-183 (1995)
	CJ	Parkinson, et al.	"The Junction-resolving Enzyme T7 Endonuclease I: Quaternary Structure and Interaction with DNA," <i>J. Mol. Biol.</i> 270:169-178 (1997)
	CK	White, et al.	"Recognition and Manipulation of Branched DNA Structure by Junction-resolving Enzymes," <i>J. Mol. Biol.</i> 269:647-664 (1997)

Examiner Signature: \_\_\_\_\_

Date Considered: \_\_\_\_\_

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation *if not* in conformance and not considered. Include copy of this form with next communication to applicant.